

022004

16569 U.S. PTO

UTILITY
PATENT APPLICATION
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 647P007

<i>First Inventor</i>	Peter Hayward
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<i>Title</i>	High CTE Reaction . . .
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Express Mail Label No. ER 247779774 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop Patent Application
Commilssioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

1. ☒ **Fee Transmittal Form (e.g., PTO/SB/17)**
(Submit an original and a duplicate for fee processing)
2. ☒ **Applicant claims small entity status.**
See 37 CFR 1.27.
3. ☒ **Specification** [Total Pages 33]
(preferred arrangement set forth below)
- Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table,
or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. ☐ **Drawing(s) (35 U.S.C. 113)** [Total Sheets _____]
5. **Oath or Declaration** [Total Sheets _____]
- a. ☐ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(S)**
Signed statement authenticating deleting inventor(s)
name in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
6. ☐ **Application Data Sheet. See 37 CFR 1.76**

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (*Appendix*)
8. Nucleotide and/or Amino Acid Sequence Submission (*if applicable, all necessary*)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ Paper
- c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure ☐ Copies of IDS
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122
(b)(2)(B)(i). Applicant must attach form PTO/SB/35
or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:

Prior application information:

Examiner

Art Unit:

For CONTINUATION OR DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☐ Customer Number: OR ☐ Correspondence address below

Name	Kevin S. Lemack
------	-----------------

Niels & Lemack

Address	Nields & Lemack 176 E. Main Street - Suite 7
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City	Westboro
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State	MA
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MA

Zip Code	01581
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01581

Country	US
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Telephone	508-898-1818
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<i>Fax</i>	508-898-2020
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Name (Print/Type) | Kevin S. Lemack

Registration No. (Attorney/Agent) | 32.579

Signature

Date	February 20, 2004
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This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 385.00

Complete if Known

Application Number
Filing Date
First Named Inventor Peter Hayward
Examiner Name
Art Unit
Attorney Docket No. 647P007

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number
Deposit Account Name

14-0930

Nields & Lemack

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	385.00
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 385.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
13	-20** = 0	9	0
Independent Claims	3	-3** = 0	43
Multiple Dependent		145	0

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0

**or number previously paid, if greater. For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1808 180	1808 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

SUBMITTED BY

Name (Print/Type) Kevin J. Lemack Registration No. 32,579 Telephone 508-898-1818
Signature Date Feb. 20, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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16569 U.S. PTO
-022004

Attorney Docket No. 647P007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Peter Hayward, Richard Higgins, Robert Goldsmith and Bruce Bishop**

For: **HIGH CTE REACTION-BONDED CERAMIC MEMBRANE SUPPORTS**

Commissioner for Patents
P.O. Box 1450
Mail Stop: Patent Application
Alexandria, VA 22313-1450

Sir:

LETTER

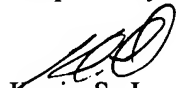
The above-identified applicants enclose for filing a patent application entitled "**HIGH CTE REACTION-BONDED CERAMIC MEMBRANE SUPPORTS**". Said attached patent application includes (1) Utility Patent Application Transmittal Form (1-Page); (2) Patent Application: 33-Page Specification (including 3-Pages of Claims (13) and 1-Page Abstract), (3) Fee transmittal form, together with a check in the amount of \$385.00 in payment of the filing fee.

The executed Declaration and Power of Attorney, with surcharge, will be submitted in due course.

All correspondence concerning this application should be mailed to:

**Kevin S. Lemack
Niels & Lemack
176 E. Main Street - Suite 7
Westboro, Massachusetts 01581**

Respectfully submitted,


**Kevin S. Lemack
Attorney for Applicant
Registration No. 32,579**

Date: February 20, 2004

EXPRESS MAIL NO: ER 247779774 US

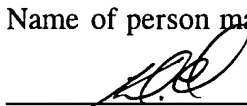
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Peter Hayward et al.
Serial No. : Not yet assigned
Filed : Herewith By Express Mail
For : HIGH CTE REACTION-BONDED CERAMIC MEMBRANE
SUPPORTS
Examiner : Not yet assigned
Art Unit : Not yet assigned
Attorney
Docket No. : 647P007
Type of paper : Letter

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DATE OF DEPOSIT: February 20, 2004

I hereby certify that this patent application is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" Service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Mail Stop: Patent Application, Alexandria, VA 22313-1450.

Kevin S. Lemack
Name of person mailing paper or fee


Signature of person mailing paper or fee

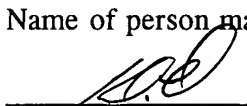
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Applicants : Peter Hayward et al.
Serial No. : Not yet assigned
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SUPPORTS
Examiner : Not yet assigned
Art Unit : Not yet assigned
Attorney
Docket No. : 647P007
Type of paper : Utility Patent Application Transmittal Form

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Kevin S. Lemack
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Art Unit : Not yet assigned
Attorney
Docket No. : 647P007
Type of paper : Patent Application

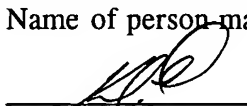
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Kevin S. Lemack

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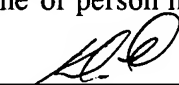
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Applicants : Peter Hayward et al.
Serial No. : Not yet assigned
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For : HIGH CTE REACTION-BONDED CERAMIC MEMBRANE
SUPPORTS
Examiner : Not yet assigned
Art Unit : Not yet assigned
Attorney
Docket No. : 647P007
Type of paper : Fee Transmittal Form, together with a check

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Kevin S. Lemack
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